

SEQUENCE LISTING

<110> Alnemri, Emad S.

<120> AN IAP BINDING PEPTIDE OR POLYPEPTIDE AND METHODS OF USING THE SAME

<130> 480140.465

<140> US 09/939,293

<141> 2001-08-24

<160> 27

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1358

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (20)...(739)

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Met Ala Ala Leu Lys Ser Trp Leu Ser Arg Ser

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gta act tca ttc ttc agg tac aga cag tgt ttg tgt gtt cct gtt gtg 100 Val Thr Ser Phe Phe Arg Tyr Arg Gln Cys Leu Cys Val Pro Val Val

gct aac ttt aag aag cgg tgt ttc tca gaa ttg ata aga cca tgg cac 148 Ala Asn Phe Lys Lys Arg Cys Phe Ser Glu Leu Ile Arg Pro Trp His 30 35 40

aaa act gtg acg att ggc ttt gga gta acc ctg tgt gcg gtt cct att 196 Lys Thr Val Thr Ile Gly Phe Gly Val Thr Leu Cys Ala Val Pro Ile 45 50 55

gca cag aaa tca gag cct cat tcc ctt agt agt gaa gca ttg atg agg 244
Ala Gln Lys Ser Glu Pro His Ser Leu Ser Ser Glu Ala Leu Met Arg
60 65 70 75

aga gca gtg tct ttg gta aca gat agc acc tct acc ttt ctc tct cag 292
Arg Ala Val Ser Leu Val Thr Asp Ser Thr Ser Thr Phe Leu Ser Gln
80 85 90

acc aca tat gcg ttg att gaa gct att act gaa tat act aag gct gtt 340 Thr Thr Tyr Ala Leu Ile Glu Ala Ile Thr Glu Tyr Thr Lys Ala Val

B3

95 100 105 tat acc tta act tct ctt tac cga caa tat aca agt tta ctt ggg aaa 388 Tyr Thr Leu Thr Ser Leu Tyr Arg Gln Tyr Thr Ser Leu Leu Gly Lys 115 436 atg aat tca gag gag gaa gat gaa gtg tgg cag gtg atc ata gga gcc Met Asn Ser Glu Glu Glu Asp Glu Val Trp Gln Val Ile Ile Gly Ala 130 135 aga get gag atg act tea aaa eac caa gag tae ttg aag etg gaa ace 484 Arg Ala Glu Met Thr Ser Lys His Gln Glu Tyr Leu Lys Leu Glu Thr 140 145 150 532 act tgg atg act gca gtt ggt ctt tca gag atg gca gca gaa gct gca Thr Trp Met Thr Ala Val Gly Leu Ser Glu Met Ala Ala Glu Ala Ala 160 165 tat caa act ggc gca gat cag gcc tct ata acc gcc agg aat cac att 580 Tyr Gln Thr Gly Ala Asp Gln Ala Ser Ile Thr Ala Arg Asn His Ile 175 180 185 cag ctg gtg aaa ctg cag gtg gaa gag gtg cac cag ctc tcc cgg aaa 628 Gln Leu Val Lys Leu Gln Val Glu Glu Val His Gln Leu Ser Arg Lys 190 195 gca gaa acc aag ctg gca gaa gca cag ata gaa gag ctc cgt cag aaa 676 Ala Glu Thr Lys Leu Ala Glu Ala Gln Ile Glu Glu Leu Arg Gln Lys 205 210 aca cag gag gaa ggg gag cgg gct gag tcg gag cag gag gcc tac Thr Gln Glu Gly Glu Glu Arg Ala Glu Ser Glu Gln Glu Ala Tyr 225 230 ctg cgt gag gat tga gggcctgagc acactgccct gtctccccac tcagtgggga 779 Leu Arg Glu Asp * aagcaggggc agatgccacc ctgcccaggg ttggcatgac tgtctgtgca ccgagaagag 839 gcggcaggtc ctgccctggc caatcaggcg agacgccttt gtgagctgtg agtgcctcct 899 gtggtctcag gcttgcgctg gacctggttc ttagcccttg ggcactgcac cctgtttaac 959 atttcacccc actctgtaca gctgctctta cccatttttt ttacctcaca cccaaagcat 1019 tttgcctacc tgggtcagag agaggagtcc tttttgtcat gcccttaagt tcagcaactg 1079 tttaacctgt tttcagtctt atttacgtcg tcaaaaatga tttagtactt gttccctctg 1139 ttgggatgcc agttgtggca gggggaggg aacctgtcca gtttgtacga tttctttgta 1199 tgtatttctg atgtgttctc tgatctgccc ccactgtcct gtgaggacag ctgaggccaa 1259 ggagtgaaaa acctattact actaagagaa ggggtgcaga gtgtttacct ggtgctctca 1319 acaggactta acatcaacag gacttaacac agaaaaaaa <210> 2 <211> 40

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<212> PRT

<213> Homo sapiens

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Ala Val Pro Ile Ala Gln Lys Ser Glu Pro His Ser Leu Ser Ser Glu
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Ala Leu Met Arg Arg Ala Val Ser Leu Val Thr Asp Ser Thr Ser Thr
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Phe Leu Ser Gln Thr Thr Tyr Ala
        35
<210> 3
<211> 5
<212> PRT
<213> Homo sapiens
<220>
<221> VARIANT
<222> 4
<223> Xaa = Arg, Gln or Gly
<400> 3
Gln Ala Cys Xaa Gly
<210> 4
<211> 7
<212> PRT
<213> Homo sapiens
<400> 4
Met Lys Ser Asp Phe Tyr Phe
<210> 5
<211> 5
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Ala Val Pro Ile Ala
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<211> 7
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<400> 6
Ala Val Pro Ile Ala Gln Lys
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Ala Val Pro Ile Ala Gln Lys Ser Glu Pro His Ser Leu Ser Ser Glu
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                                    10
Ala Leu Met Arg Arg Ala Val Ser Leu Val Thr Asp Ser Thr
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<212> PRT
<213> Homo sapiens
<400> 8
Ala Val Pro Ile Ala Gln Lys Ser Glu Pro His Ser Leu Ser Ser Glu
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                                    10
Ala Leu Met Arg Arg Ala Val Ser Leu Val Thr Asp Ser Thr Ser Thr
Phe Leu Ser Gln Thr Thr Tyr
        35
<210> 9
<211> 9
<212> PRT
<213> Homo sapiens
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Met Lys Ser Asp Phe Tyr Phe Gln Lys
                5
<210> 10
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<212> PRT
<213> Homo sapiens
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Thr Asp Ser Thr Ser Thr Phe Leu
<210> 11
<211> 35
<212> PRT
<213> Homo sapiens
Ala Val Pro Ile Ala Gln Lys Ser Glu Pro His Ser Leu Ser Ser Glu
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Ala Leu Met Arg Arg Ala Val Ser Leu Val Thr Asp Ser Thr Ser Thr
                                25
Phe Leu Ser
        35
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<213> Homo sapiens
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Ile Glu Thr Asp Ala Val Pro Ile Ala
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Ala Val Pro Ile
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<211> 4
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Ala Thr Pro Phe
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Ala Val Pro Phe
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<210> 17
<211> 4
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<213>. Mus musculus
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Ala Val Pro Tyr
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<210> 18
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<213> Xenopus sp.
<400> 18
Ala Thr Pro Val
<210> 19
<211> 239
<212> PRT
<213> Homo sapiens
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Met Ala Ala Leu Lys Ser Trp Leu Ser Arg Ser Val Thr Ser Phe Phe
                                    10
Arg Tyr Arg Gln Cys Leu Cys Val Pro Val Val Ala Asn Phe Lys Lys
            20
                                25
Arg Cys Phe Ser Glu Leu Ile Arg Pro Trp His Lys Thr Val Thr Ile
                            40
Gly Phe Gly Val Thr Leu Cys Ala Val Pro Ile Ala Gln Lys Ser Glu
                        55
Pro His Ser Leu Ser Ser Glu Ala Leu Met Arg Arg Ala Val Ser Leu
Val Thr Asp Ser Thr Ser Thr Phe Leu Ser Gln Thr Thr Tyr Ala Leu
                85
                                    90
Ile Glu Ala Ile Thr Glu Tyr Thr Lys Ala Val Tyr Thr Leu Thr Ser
                                105
Leu Tyr Arg Gln Tyr Thr Ser Leu Leu Gly Lys Met Asn Ser Glu Glu
                            120
Glu Asp Glu Val Trp Gln Val Ile Ile Gly Ala Arg Ala Glu Met Thr
                                            140
                        135
Ser Lys His Gln Glu Tyr Leu Lys Leu Glu Thr Thr Trp Met Thr Ala
                                        155
                    150
Val Gly Leu Ser Glu Met Ala Ala Glu Ala Ala Tyr Gln Thr Gly Ala
                                    170
                                                         175
                165
Asp Gln Ala Ser Ile Thr Ala Arg Asn His Ile Gln Leu Val Lys Leu
                                185
                                                     190
Gln Val Glu Glu Val His Gln Leu Ser Arg Lys Ala Glu Thr Lys Leu
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B3 Cud

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Ala Glu Ala Gln Ile Glu Glu Leu Arg Gln Lys Thr Gln Glu Gly
                       215
                                           220
Glu Glu Arg Ala Glu Ser Glu Gln Glu Ala Tyr Leu Arg Glu Asp
225
                    230
                                        235
<210> 20
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<212> PRT
<213> Homo sapiens
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Ala Val Pro Ile Ala Gln Lys Ser Glu Pro His Ser
         5
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<212> PRT
<213> Homo sapiens
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Met Lys Ser Asp Phe Tyr Phe Gln Lys Ser Glu Pro His Ser
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<212> PRT
<213> Homo sapiens
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1
                5
                                   10
Ala Leu Met Arg Arg Ala Val Ser Leu Val Thr Asp Ser Thr Ser Thr
          20
Phe Leu Ser Gln Thr Thr Tyr Ala
        35
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<212> PRT
<213> Artificial Sequence
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<223> Deletion mutant of Smac
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                                    10
Arg Ala Val Ser Leu Val Thr Asp Ser Thr Ser Thr Phe Leu Ser Gln
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Thr Thr Tyr Ala
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By

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<210> 24
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<213> Artificial Sequence
<220>
<223> Deletion mutant of Smac
<400> 24
Ala Val Ser Leu Val Thr Asp Ser Thr Ser Thr Phe Leu Ser Gln Thr
1
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Thr Tyr Ala
<210> 25
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<212> PRT
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<223> Deletion mutant of Smac
<400> 25
Ala Val Pro Ile Ala Gln Lys Ser
<210> 26
<211> 30
<212> PRT
<213> Artificial Sequence
<220>
<223> Deletion mutant of Smac
<400> 26
Ala Val Pro Ile Ala Gln Lys Ser Glu Pro His Ser Leu Ser Ser Glu
                                   10
Ala Leu Met Arg Arg Ala Val Ser Leu Val Thr Asp Ser Thr
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